

### ABSTRACT

A system and method of communicating between nodes in an ad-hoc frequency-hopping based communication infrastructure, such as a Bluetooth system. The  
5 scheduling of page scan and inquiry scan periods within a piconet is based on a pseudo-random principle. By using pseudo-random scheduling of the inquiry scan and page scan intervals, the position of each interval can be easily predicted in advance. Periodic windows are predefined for a communicating node pair. Each of the periodic windows include a time point, i.e., slot, the location of which changes in a pseudo-  
10 random manner in consecutive periodic windows.

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